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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,121	12/17/2001	Sergiy Victorovich Vasylyev		5045

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SERGIY V. VASYLYEV  
10027 EAST TARN DR.  
ELK GROVE, CA 95758

EXAMINER

ROBINSON, MARK A

ART UNIT PAPER NUMBER

2872

DATE MAILED: 11/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/026,121

Applicant(s)

VASYLYEV ET AL.

Examiner

Mark A. Robinson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 2,3,5-11,14-16 and 18 are rejected under 35

U.S.C. 102(b) as being anticipated by Hockman (Re 30,027).

Regarding claim 18, Hockman shows in fig. 5 an apparatus for collecting radiation including an array of spaced apart, concave reflectors(16) with rear ends thereof being inclined toward each other, wherein energy which impinges upon the reflectors is converged through spaces between adjacent reflector rear ends, and an elongated energy receiving means(20) which is disposed in immediate energy receiving relation to each reflector such that reflected convergent beams partially superimpose on the energy receiving means.

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The limitations of claims 2,3,5-11 and 14-16 are met by Hockman as discussed in the previous office action.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hockman.

These claims stand rejected as discussed in the previous office action.

5. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hockman in view of Cornwall et al (5,180,441).

These claims stand rejected as discussed in the previous office action.

***Response to Arguments***

6. Applicant's arguments filed 8/29/03 have been fully considered but they are not persuasive.

Applicant has argued that Hockman does not show a plurality of convergent beams which are directed to a plurality of converging directions through spaces between reflector ends.

However, multiple beams shown in Hockman fig. 5 clearly converge on the receiving means(20), which is disposed in "immediate energy receiving relation" with the reflective surfaces, i.e. there are multiple beams incident or converging upon the receiving means(20) which come directly from the concave reflectors (e.g. note, from the left side of fig. 5, reflections from the first, third, and fourth reflectors).

Applicant has also argued that each additional reflection results in energy loss, which results in lower system efficiency. However, the present claims do not preclude plural reflections from the same reflector (e.g. the far-left reflector as seen in Hockman fig. 5). Note also that the present claims do not preclude the addition of other elements in the device of Hockman, such as the convex reflector(22).

Applicant has also argued that **all** rays from the light source are reflected at angles between 45 and 90 degrees. However, this limitation is not found in the claims. Regarding

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the arguments concerning Hockman's reflectors being screened with respect to the incident flux, it should be noted that this limitation is also not present in the claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant has also argued that portions of Hockman's reflectors do not satisfy certain claimed conditions, i.e.  $\beta < 90^\circ$ . However, there are portions of Hockman's reflectors which do satisfy this requirement (e.g. note the reflections coming from the third and fourth reflectors as seen from left in fig. 5 when the sun is high in the sky), and thus these feature as presently claimed are anticipated by the reference.

The remaining limitations in question are met by Hockman as set forth in the rejection.

### **Conclusion**

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS

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of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Robinson whose telephone number is (703) 305-3506.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn, can be reached at (703) 305-0024. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

MR

11/5/03

  
MARK A. ROBINSON  
PRIMARY EXAMINER